

Apple-Works Forum

The Monthly Publication of NAUG: *The National AppleWorks Users Group*

Volume II, No. 7

July 1987

TABLE OF CONTENTS

Letters to NAUG	2	Data Base Applications	17
<ul style="list-style-type: none">• Information about InfoMerge.• Template developer wants to work with others.• CP/M cards and AppleWorks.• Printer control codes in AppleWorks.• Printer settings for Mail Merge.• AppleWorks and a standard TV.• How to get the "^^" symbol in a printer control code.• Software for the Apple III.		Using AppleWorks to teach Social Studies.	
Hardware Tips	5	News From Apple	18
Leave your computer on.		A list of the correct cables to use with your computer.	
Data Base Applications	7	Word Processor/ Data Base Tips	20
How to keep your tax records organized.		How to underline in data base reports and produce bibliographies.	
Members Helping Members	11	Word Processor Tips	22
A chart of 50 NAUG members who volunteered to give technical assistance to other members.		How to print page numbers – Part 1.	
Spreadsheet Applications	16	Quick Tip	23
How to use the spreadsheet to simulate decision support software.		How to print a single page.	
News From Apple	17	Membership Information	24
Apple Computer extends their AppleWorks 2.0 upgrade offer.		Seminar Information	24
		Guidelines for Contributors	24
		Information about contributing to the <i>AppleWorks Forum</i> .	

Support for AppleWorks & ///EZ Pieces Users

Letters to NAUG

Information about InfoMerge

Dear Cathy,

Did you know that Pinpoint's InfoMerge, which I wrote, does not require the Pinpoint Desk Accessories?

Peter Meyer
Capt. Cook, Hawaii

[Ed: InfoMerge is a powerful mail merge program that has features not available in the AppleWorks 2.0 mail merge module. For example, it supports the automatic insertion of date (and time, if you have a system clock), offers non-printing comment fields so you can document your files, and includes selecting and sorting features usually available only in a data base reporting module. InfoMerge costs \$79 from Pinpoint Publishing and is available from mail order discount vendors.]

We're proud to have software developers like Peter Meyer as NAUG members.]

Template Developer Wants to Work with Others

Dear Cathleen:

I am working on a new template application which I'm calling "Let's Get Organized". I plan to create a comprehensive system to organize family and personal records, such as family history, marriage records, medical information, safe deposit box in-

ventory, investments, savings accounts, insurance, etc. I'm barely into it, so I don't know how it will work out.

I would like to work on a cooperative basis with other AppleWorks users in developing applications or assisting with problems—especially spreadsheet templates. If you know of any opportunities, please let me know. Since I'm not plugged into the world via modem, I feel a little isolated out here in California.

Louis Vincenti
8105 San Rafael Road
Atascadero, California 93422
(805) 466-5049

[Ed: Mr. Vincenti is a prolific developer of high quality AppleWorks templates. Three of his recent works were described in the "Public Domain Update" column in last month's issue of the AppleWorks Forum.]

CP/M Cards and AppleWorks

Dear Cathy,

I have a 64K CP/M (Z-80) card installed in my Apple. Is there a way I can access the 64K of RAM on that card and use it to increase my desktop in AppleWorks? Is there any other way I can benefit from that card?

Ron Ward
Ferguson, Missouri

[Ed: This is one of four letters we've received from members who want to take advantage of their CP/M card when running AppleWorks. Can any members with experience with CP/M cards help?]

AppleWorks Forum

Editor: Cathleen Merritt
Design & Laser Page Production: Bob Royce
Publisher: The National AppleWorks Users Group

© COPYRIGHT, 1987, by NAUG, the National AppleWorks Users Group, for the exclusive use and enjoyment of its members. Any reprint or reproduction must be approved, in writing and in advance, by NAUG.

The "AppleWorks Forum," ISSN # 0893-4118, is published monthly for \$24 per year by the National AppleWorks Users Group, 43566 Applewood, Canton, Michigan 48188. Second-class postage paid at Westland, Michigan.

POSTMASTER: Send address changes to AppleWorks Forum, NAUG, P.O. Box 87453, Canton, MI 48187

The **National AppleWorks Users Group (NAUG)** is an association that supports AppleWorks users. The group provides assistance to members and information about the AppleWorks program and applications of the program. Our primary means of communication with members is through the monthly newsletter entitled the **AppleWorks Forum**.

Letters...

Printer Control Codes in AppleWorks

Dear Cathy,

I recently converted from AppleWriter to AppleWorks. One of the features available in AppleWriter that I can't seem to implement in AppleWorks is the ability to embed control codes in my AppleWorks file. For example, I can easily embed commands for my new Pro-Grappler 1.0 in AppleWriter, but fail with AppleWorks.

I tried sending a Control-I command to the printer, but the characters after the Control-I were printed on the page instead of being treated as a command. For example, I entered "Control-I WI" to turn on italics...but instead of printing italics, the letters WI were printed. Any ideas?

John Jessmer, Jr.
Brooklyn Park, Minnesota

[Ed: AppleWorks will send control codes to your printer, but not as conveniently as in AppleWriter. The trick is to tell AppleWorks you have a "custom printer" and put your control codes in the areas allocated for Superscript Begin and Subscript Begin. You can't enter many codes this way, but you should be able to implement the most important features available on your system. The procedures are described in the Printer Primer article entitled "How to Get Italics in your Printouts" in the October 1986 issue of the AppleWorks Forum.]

Printer Settings for Mail Merge

Dear Cathy,

When using the Mail Merge feature in version 2.0 of AppleWorks, I had trouble when I followed Warren Williams' suggestion to leave the "Accepts top of page" command set to "NO" when you are printing on normal size paper. When printing a batch of letters using Mail Merge, each letter began a few lines further down the bottom of the page. My advice is to choose the "YES" setting whenever you are using 11 inch pages, and definitely when using Mail Merge.

Terrence Davis
Louisville, Kentucky

[Ed: Thanks for the suggestion, Terrence. Alternatively, if you want to leave the "Accepts top of page command" set to "NO" for all printing, insert a "New Page" command as the last line on your Mail Merge documents.]

AppleWorks and a Standard TV

Dear Cathy,

As a teacher at Higgins Middle School in Peabody, Massachusetts, I'd like to use a standard TV as a display with AppleWorks. Using a monitor, I have no problem. When using a TV set with an RF modulator, AppleWorks is blurry. Is there anything I can do to overcome this problem? I want to use our 25 inch TV to teach AppleWorks to our seventh and eighth graders next fall.

George Lemire
Danvers, Massachusetts

[Ed: Unfortunately, any program that uses the 80-column text screen on your Apple will give unacceptable resolution on a TV; you'll need to use a monitor.]

Did you know that you can connect two monitors to a single Apple? Go to a store that sells stereo components and buy the following: (1) a "Y-connector" with one male and two female RCA plugs, and (2) an extension cord with two male RCA plugs. Plug the male part of the "Y" into the composite video port in the back of the Apple where you usually plug in your monitor. Plug the regular monitor into one female extension from the "Y". Plug the second monitor into the remaining fork of the "Y" using the extension cord. Then whatever you do on your Apple will appear on the two screens. It's not ideal, but it's better than having the entire class gather around a single monitor.

Two other suggestions:

1. Buy the best Y-connector and extension cord

(continued on the next page)

you can get. They are made to carry audio signals, not video, and video requires a higher grade of cable. Radio Shack and audio stores usually carry two grades of connectors. Get the best you can find.

2. If you have a computer connected to an RGB monitor, use that computer as your master. Then you can run three screens from the system; one from the RGB card and two connected with the Y-adaptor to the composite video port on the back of the Apple.]

How to Get the “^” Symbol in a Printer Control Code

Dear Cathy,

I do a lot of scientific writing with AppleWorks and make heavy use of subscripts and superscripts. One of my printers is a TI-850. The only way to get a superscript or subscript with that printer is by using half line-feeds and reverse half line-feeds. The command for a reverse half line-feed is with the sequence ESC ^ . However, I cannot enter the ^ as a control character directly into the custom printer control code sequence. Is there any way to get a ^ into the printer code sequence in AppleWorks?

Larry Thaete
Boulder, Colorado

[Ed: You can enter the caret (^) into a printer control code sequence in AppleWorks...but not directly. You will need a “Disk Zap” program to enter the caret. My favorite disk zapper is Pro Byter from Beagle Bros.

The procedure is to enter some unusual code into the printer setup area and then use the Disk Zap program to replace that code with a caret. More specifically:

1. Insert the code ESC ?? in the printer control code area where you want the ESC ^ sequence to appear. AppleWorks will store this sequence in the file SEG.PR on the Program Disk.
2. Boot Pro Byter and use the Find command to

locate the double question marks in SEG.PR. Then replace the two question marks with a caret followed by a space.

The process is not difficult and the documentation that comes with Pro Byter is excellent. This is also a good way to enhance your understanding of how your computer and AppleWorks function. Once you're comfortable with Pro Byter, you can do some interesting things with AppleWorks. For example, you can customize the menus to personalize your copy of the program.]

Software for the Apple ///

Dear Cathy,

Our school recently received an Apple /// as a donation. I understand we can use /// E-Z Pieces, an AppleWorks work-alike on the Apple /// and that we can read and write /// E-Z Pieces files with AppleWorks. Is that true?

Do you know of an inexpensive source for /// E-Z Pieces and other software and accessories for our Apple ///?

Connie Peters
Decatur, Illinois

[Ed: Your Apple /// is ProDOS compatible; it can read and write on disks formatted under ProDOS on an Apple II. That means you can use /// EZ Pieces to read and write AppleWorks files. Dave Ottalini described the relationship between SOS (the disk operating system on the Apple ///) and ProDOS in his letter published on page 4 of the December 1986 issue of the AppleWorks Forum.

You can get Apple /// equipment and software from two discount mail order firms: Sun Remarketing, Box 4059, Logan, Utah 84321 (800-821-3221) and the Association of Independent Microdealers, 3010 N. Sterling Avenue, Peoria, Illinois 61604 (800-342-5246). Both firms offer significant discounts on Apple II and /// software and accessories.]

Leave Your Computer On

by Cathleen Merritt

Many AppleWorks users are discovering the benefits of installing extended memory cards in their computers. These cards provide four advantages:

1. They let you load all of AppleWorks into your computer for faster operation of the program.
2. They let you run AppleWorks conveniently with only one disk drive.
3. They let you load larger files onto the desktop.
4. They let you segment the memory on the card so a portion of that memory can be allocated to a "RAM disk"; a simulated disk drive that runs with the speed of RAM chips. You can copy your programs onto that RAM disk. Programs loaded onto the RAM disk operate faster than programs running from floppy or hard disks. In addition, you can switch between programs such as spelling checkers and AppleWorks without changing disks. (It takes me approximately three seconds to quit AppleWorks and start running Pinpoint's Document Checker.)

However, configuring the card to serve as a RAM disk and loading AppleWorks and all your other programs onto the card can be an inconvenience. It takes me almost ten minutes to load AppleWorks, Document Checker (including the spelling dictionary), Point-to-Point, ThinkWorks (an outliner from Megahaus) and UTIL.SYSTEM from Copy II+ onto my one megabyte RamWorks card.

Leave Your Computer On

Once all that work is done, you will be loath to turn off your Apple; all the programs and files loaded on your RAM disk will be lost when you power down. One solution is to leave your Apple on all the time.

Those of us brought up in the age of electronic vacuum tubes probably think this will shorten the life

of your equipment. However, that is not true of solid state equipment like a computer. Unless you've added a fan to your Apple, there are no moving parts in the machine and nothing that can wear out. The most likely time any damage will occur in your machine is when you turn it on...that's the time you're most likely to get a harmful power surge.

Some Related Suggestions

However, here are some other things to consider if you leave your Apple on:

1. If you live in an area subject to power surges and lightening strikes, or if you are worried about overheating your Apple, get a combination fan and surge protector. I like the Kensington Microware System Saver (approximately \$65 from mail order dealers). While the fan in this unit adds the only moving parts to your Apple and you might have to replace the unit every few years, you should be willing to pay \$65 every three or four years to have a cool, power protected Apple that you don't have to reload with programs every time you use the machine. Your Apple should last longer and you should recover the \$65 through reduced repair costs.
2. When you leave your computer unattended for more than 15-20 minutes, turn the brightness down on the screen, but don't turn the monitor's power off. Your monitor is under the greatest stress when you turn the power off and on; so leave it on. However, turn the brightness down when you leave the computer for any extended period of time; the phosphorus on the inside of the monitor will permanently darken if it is "lit" for a long time.
3. If there is a chance that the power will be temporarily interrupted while you are away from the computer, save your data files onto disks before

(continued on the next page)

Hardware Tips...

leaving the machine. All data in RAM will be lost if the power fails, so make certain you have the latest copy of your files on your disk. If the power in your area is unreliable, consider getting a battery backup for your Apple. Plug the backup system into the wall outlet and always run your Apple from the battery pack. In that way, your Apple is not subject to the vagaries of an unreliable power supply. (If you have an Ap-

ple //c, Roger Coats sells the Prairie Pack battery backup system for about \$140.)

4. If there is a power interruption, your Apple will turn on your floppy disk drive when the power returns. Some machines will leave the drive running unless there is a ProDOS or DOS 3.3 disk in the drive. Since there are moving parts in the disk drive that will eventually wear out, you should check your computer by turning it on

with nothing in the drive. If your disk drive keeps running, put a copy of the AppleWorks Startup Disk in Drive 1 when you leave the machine unattended for long periods of time. In that way, your drive will stop turning if the power goes off while your machine is on.

In summary, if you want to make it easier to use an extended memory card with AppleWorks and prolong the life of your computer, leave your Apple on all the time. However, remember to turn the brightness down on your monitor and leave an AppleWorks Startup Disk in Drive 1.

FREE!
 3-month subscription
 to National AppleWorks
 Users Group with every
 purchase. Hurry, limited offer.

**We have the
HIGHEST QUALITY
AE APPLIED
ENGINEERING
and the
LOWEST PRICES
All In Stock!**



Apple //c
is a registered
trademark
of Apple
Computer
Inc.

APPLIED ENGINEERING

(additional AE items in stock)

GS-RAM, 1.5 Meg	\$284.00
GS-RAM Plus, 1 Meg	354.00
Z-RAM Ultra 1, 512K	189.00
Z-RAM Ultra 2, 1 Meg	294.00
Z-RAM Ultra 3, 1 Meg	339.00
RamFactor, 1 Meg	279.00
RamWorks III, 1 Meg	249.00
Serial Pro	124.00
RamCharger for RamFactor	134.00
TransWarp	209.00
TimeMaster H.O.	84.00
Phasor	137.00

PORTABLE SYSTEM

C-VUE LCD Flat Monitor for //c	\$299.00
C-VUE LCD for Laser 128	338.00
Prairie Power System, Battery Pack (8 Hr. UPS) & Carrying Case	139.00
//c Power Cigarette Lighter Adapter	24.95
//c Power Extension Cable	16.95
//c Power Y Adapter	18.95

- If you don't see it, CALL US!
- Next-day delivery available

SOFTWARE

AppleWorks 1.3	\$179.00
Locksmith 6.0 (Reduced!)	59.00
Pinpoint StarterPak	139.00
Bag of Tricks 2	49.95

HARDWARE

Panasonic DMP Printer (Imagewriter substitute)	\$327.00
Enhancement Kit	62.00
Promodem 300C	119.00
L.A. 30 Meg SCSI Hard Drive (MacPlus)	770.00
L.A. 20 Meg SCSI Hard Drive (MacPlus)	650.00
L.A. 10 MB Hard Disk (Plus, //e, //c, GS)	650.00
L.A. 20 MB Hard Disk (Plus, //e, //c, GS)	797.00
Sider 10 Meg (//e, GS)	575.00
Sider 20 Meg (//e, GS)	645.00
AB Switch Box	29.00
ABCD Switch Box	39.00
5.25 DSDD (Disks) with order (10 pak)	8.99
3.50 DSDD (Disks) with order (10 pak)	21.99
Top Notch Disk Notcher	12.95
C-VUE Travel Kit (protective cover, lens cleaner, lubricator)	\$9.95

MasterCard and VISA accepted
Prices subject to change without notice



Moving?

Let us know if you are moving.
Send us your address label from
a recent issue of the **Apple-
Works Forum** or your **NAUG**
membership number that is on
the label along with your new ad-
dress and phone number.

Name

Membership N°

New Address

City/ State/ Zip

Phone

**Roger
Coats**

P.O. Box 171466
San Diego, CA 92117

TOLL FREE ORDERLINE: 1-800-438-2883
(7 days, 8 am-5 pm PST) (AK, HI, & outside CA)

All Prices FOB San Diego

**CALL (619) 274-1253 (within CA & outside U.S.) for
FREE • Technical Support • Appleworks Support
and • Price Quotes on all Apple Products**

Keeping Your Tax Records

by Warren Williams

Here's how to use an AppleWorks data base to maintain your tax records in an orderly, efficient manner.

Now that you've filed your 1986 tax return, you might not want to hear about taxes for another year, so maybe this article is poorly timed. On the other hand, you might want to know how to use the AppleWorks data base to keep your tax records and generate summary reports. You can use those reports to complete your tax forms.

If you spend a week of evenings digging through shoe boxes to get your receipts and tax records in order, this article is for you. With AppleWorks and a little discipline, it will only take a couple of hours.

The procedures are simple:

1. Set up an AppleWorks data base to store tax-related information.
2. Enter tax-related entries into the data base during the tax year.
3. Generate year end summary reports.

An AppleWorks Tax Data Base

Here is more specific information about the system:

Create an AppleWorks data base file with the following categories:

DATE
PAID TO/FROM
I/E
AMOUNT
CHECK #/CASH/MC
TAX CATEGORY
NOTE

Figure 1 is an example of the data base screen.

Enter data into these categories as follows:

DATE: This field contains the date on which you enter the transaction; not the date the transaction oc-

curred. That will help you locate your receipt. I'll describe that system below.

PAID TO/FROM: This field contains the name of the payee or payor.

I/E: Enter an "I" to indicate an income item, an "E" to indicate an expense.

AMOUNT: Enter the amount of the transaction.

CHECK #/CASH/MC: Enter the type of transaction. If it was a checking account transaction, enter the check number. "MC" stands for Master Card. This will help you find the receipt or cancelled check if you need to locate a receipt or if you are audited.

TAX CATEGORY: Enter a number in this field to indicate the tax consequence of the transaction. Is it related to mortgage interest on your house? A cash contribution to a charity? Consulting income? I will discuss these categories later.

NOTE: Enter any notes to help you remember the transaction. A note in an entertainment transaction might be "Signed contract to do mobility study". That will help you remember business-related work that occurred at a dinner meeting.

(continued on the next page)

Figure 1. Sample Data Entry Record.

Record 1 of 1

```
=====
DATE:      Jan 12 87
PAID TO/FROM: Dr. Thomas Hall, DDS
I/E:       E
AMOUNT:    120.00
CHECK#/CASH/MC: 1281
TAX CATEGORY: 410
NOTE:      BILL DUE JAN. 31
=====
```

Data Base Applications...

More about Tax Categories

This record keeping system is built around the concept of "Tax Categories". You should set up a tax category for each line on your federal income tax form. For example, I have one category for salary, one for consulting income, a few for consulting expenses, one for professional travel, one for professional books, one for cash contributions to charities, and another for non-cash contributions (because the IRS requires us to report those figures on separate lines in our 1040 forms).

I suggest that you organize all your data by tax category number instead of by description. The reasons for this recommendation appear in Frank Zucarro's article entitled "Data Base Tips: Using Codes Instead of Names and Words" in the October 1986 issue of the *AppleWorks Forum*.

You can use the AppleWorks data base module to help you keep track of your tax categories and remember their associated numbers. You should develop a tax category data base with three categories: CATEGORY NUMBER, I/E, and DESCRIPTION. You can enter all your categories into this data base and keep the file on the desktop. While entering data into your record keeping system, you can use the Apple-Q command to look at your list of categories if you ever forget a category number. Alternatively, you can print a list of these codes and keep them handy when you enter data.

Figure 2 depicts the tax category data entry screen. Figure 3 shows a list of some of my tax categories.

Entering Tax-Related Transactions

Like many taxpayers, I used to keep my receipts in

one or more shoe boxes near my desk. At the end of the year, I would take out the shoe boxes and sort the receipts into different groups, then total the receipts in each category. Facing this mass of unsorted receipts at the end of the tax year was a disheartening experience.

Here's a procedure that might help you use your AppleWorks data base to keep track of your receipts:

1. Pay your bills as usual and drop all receipts into a shoe box (that sounds familiar).
2. Every two weeks, take your checkbook, appointment schedule, and shoe box to the computer and enter all transactions that have tax consequences. These include all tax-related checks written, all tax-related cash or credit card receipts in the shoe box, and all travel expenses (copied from your appointment schedule). Enter the current date as the date of each transaction. (Even though the transaction might have occurred on March 4th, you will be putting the receipts in an envelope marked with the date on which you enter the transactions...not March

Figure 3: Tax Categories

CATEGORY #	I/E	DESCRIPTION
100	I	Salary, Husband
102	I	Salary, Wife
110	I	Interest earned
120	I	Dividends earned
130	I	Tax refunds received
135	I	Capital gains
199	I	Miscellaneous income
200	I	Rental Apt.--income--rent
210	E	Rental Apt.--Advertising
220	E	Rental Apt.--Clean/Maintain
235	E	Rental Apt.--Legal fees
240	E	Rental Apt.--Interest
250	E	Rental Apt.--Repairs
255	E	Rental Apt.--Supplies
260	E	Rental Apt.--Taxes
265	E	Rental Apt.--Utilities
270	E	Rental Apt.--Other expenses
300	E	Child care
305	E	Contributions--cash
310	E	Contributions--non-cash
315	E	Contributions--political
320	E	Educational Expenses--Husband

Figure 2: Tax Category Data Entry Screen

Record 29 of 29

CATEGORY #: 320

I/E: E

DESCRIPTION: Educational Expenses--Husband

type entry or use @ commands

Data Base Applications...

4th. To locate the receipt, you will need to know the date under which it is filed. The receipt has the actual transaction date.)

3. Take all receipts out of the shoe box, put them in an envelope, and write the current date on the envelope.

Now you can find every receipt. For example, say that the IRS wants to see a receipt to show that you actually paid by Master Card for a subscription to a professional journal. You can search your data base for the name of that journal and find the transaction. The date on that transaction is also the date on the envelope containing the receipt; you can easily find the receipt. The Tax Report described below and depicted in Figure 4 will also help you locate your receipt.

Generating Tax Reports

At the end of the year, you can generate a summary report to help you complete your tax forms. Save that report in case you are audited. Figure 4 depicts a portion of a Tax Report.

You generate that report as follows:

1. Use the Arrange command (Apple-A) to sort the transactions first by date and then by tax category.

ry. This will give you a chronological list of all deductible expenses in each tax category.

2. Use the Apple-G command to tell AppleWorks to "group" by tax category.
3. Use the Apple-T command to tell AppleWorks to print the total of the AMOUNT category; that gives you the total dollar amount of the transactions in each category.

Then copy the total amounts from the report onto your tax forms.

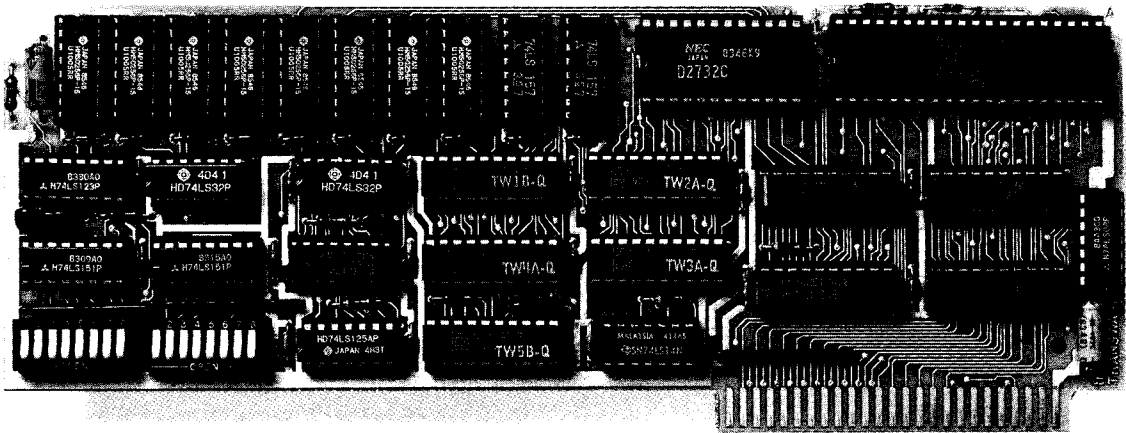
I submitted a copy of the tax template and tax category data base to the NAUG public domain library. [Ed: The Williams Tax Templates and ten other templates are on the HOME 01 NAUG public domain disk. You can order this disk from the NAUG Public Domain Library at the usual rates: \$6 for the first disk, \$4 for each additional disk.]

[Dr. Warren Williams teaches courses in the Educational Technology program at Eastern Michigan University. He is a technical advisor to NAUG, a frequent contributor to the AppleWorks Forum, and conducts AppleWorks seminars throughout the country.]

Figure 4: Tax Report

DATE	PAID TO/FROM	AMOUNT	CHECK#	TAX CAT	NOTE
Jan 3 87	Mary Smith	425.00		200	January rent payment
Jan 29 87	Mary Smith	425.00		200	Rent payment-- February
		850.00			
Jan 28 87	Golden Isles Condo.	180.00	320	220	Feb. condo fee
Mar 2 87	Golden Isles Condo.	180.00	338	220	Mar. condo fee
		360.00			
Jan 16 87	Little Folks Nursery	120.00	305	300	January fee
Feb 4 87	Little Folks Nursery	120.00	330	300	February fee
Mar 3 87	Little Folks Nursery	120.00	340	300	March fee
		360.00			
Mar 5 87	American Cancer Soc	50.00	342	305	Donation
Mar 8 87	Ecology Center	20.00	Cash	305	Walk-a-thon
		70.00			
		1640.00*			

To boldly go at speeds no Apple has gone before.



Get TransWarp.™ The *fastest* accelerator you can buy for your Apple™ IIe, II, or II+.

Computing at warp speed!

It's an experience you shouldn't miss. And with TransWarp, you won't have to. Because TransWarp will run your software up to *3.6 times faster* — leaving other accelerators in the stardust!

No more waiting while your Apple™ slowly rearranges text or calculates spreadsheets. With 256K of ultra-fast RAM, TransWarp speeds up *all* Apple software — including AppleWorks, SuperCalc 3a, VisiCalc, and all educational software, graphics and games. And it's compatible with all standard peripheral cards (such as RamWorks and Apple memory cards), Profile and Sider hard disks, 3½" UniDisks, 80-column cards, modems, clock cards, mice and more! You name it, TransWarp accelerates it. There's even a 16 bit upgrade chip available should 16 bit software become available for the Apple.

An important difference.

TransWarp's not the only speedup card on the market. But it's the only one that accelerates your Apple's main memory, ROM *and auxiliary memory*. And with more and more programs residing in auxiliary memory, buying anyone else's accelerator makes less and less sense because TransWarp speeds up software up to 3 times faster than other cards on the market because the others can't accelerate programs in auxiliary memory. That's why TransWarp is so much faster than the rest. Nearly all of today's more powerful programs run partially or completely in auxiliary memory; programs like AppleWorks, Pinpoint, Managing Your Money, SuperCalc 3a, BPI and Pascal, just to name a few. Why settle for a card that only accelerates part of memory? Get TransWarp, it accelerates all memory. TransWarp even works with most D.M.A. devices including the Swyft™ card.

There's one more difference. Since TransWarp doesn't use memory caching, you get consistent high speed performance.

A cinch to use.

Simply plug TransWarp into any slot in your Apple II, II+ or IIe —including slot 3 in the IIe. Instantly you'll be computing at speeds you only dreamed about before. And should you ever wish to run at normal speed, simply press the ESC key while turning your Apple on.

Since TransWarp is completely transparent, you won't need preboot disks or special software. It's ready to go right out of the package!

Speed = Productivity

Imagine the productivity gains you'll achieve when your programs are running over three times faster. TransWarp is so powerful, your Apple will make IBM PCs™ and even ATs™ look like slowpokes — whether you're planning taxes, plotting charts or playing games! Take a look at a few of the features that set TransWarp apart:

- 3.6 MHZ 65C02
- 256K of ultra-fast on-board RAM
- Accelerates main *and* auxiliary memory
- Low power consumption for cool operation
- Totally transparent operation with all software
- Plugs into any slot, including slot 3 on the Apple IIe
- Accelerated 16 bit option available
- Can run at full acceleration, half acceleration or normal Apple speed
- 5 year warranty

Satisfaction guaranteed!

Give *your* Apple the TransWarp advantage. With our risk-free 15-day money back guarantee, you have nothing to lose but wasted time. Call today!

TransWarp Accelerator \$279
16 bit upgrade (may add later) \$89

For fast response:

Call Applied Engineering 9 a.m. to 11 p.m., 7 days at (214) 241-6060. MasterCard, VISA and C.O.D. welcome. Texas residents add 5½% sales tax. Add \$10.00 if outside U.S.A.

Or mail check or money order to Applied Engineering, P.O. Box 798, Carrollton, TX 75006.

AE APPLIED ENGINEERING™
The Apple enhancement experts

P.O. Box 798, Carrollton, TX 75006 (214) 241-6060

Volunteers to Help You with AppleWorks

by Bob Royce

The May issue of the *AppleWorks Forum* included a chart of members who volunteered to provide technical assistance to others. This month we added more than 40 volunteers to our list. (The chart reflects additions as of June 1.)

There are two parts to this insert— a chart indicating the type of help available from each member, and a list of the volunteers' phone numbers and the appropriate times to call. The list of volun-

teers begins on this page and continues on page 14. The chart begins on the next page.

[Ed: We've placed this article in the center of the newsletter to make easy to pull out and keep by your phone.]

[Bob Royce is an elementary school teacher in Saline, Michigan. He is responsible for the design and layout of the AppleWorks Forum.]

Instructions

The categories for help are listed down both sides of the chart. Along the bottom of the chart is a list of the members willing to offer technical assistance, the state in which they live, and a reference number. Use the reference number to help you find the volunteer in the list. The chart is organized so the volunteers are separated into time zones and individual states.

To use the chart, locate the category in which you need help. Then look across until you see a "•", which indicates a person is comfortable helping with problems in that area. Use the reference number along the bottom or top to help you find the phone number(s) for that person. Be prepared to pay collect charges if your consultant must return your call.

- | | |
|---|---|
| 1 Martin Knight, Middletown, CT
203/ 346-9698... M-F 6-9pm
GEne - M.KNIGHT | 8 Jane Harris, Grand Rapids, MI
616/ 458-2653... Sat 12-11pm, Sun 10am-11pm |
| 2 Larry T. Brooks, Tampa, FL
813/ 874-7355... M-F 6-9pm | 9 Bill Neef, Grass Lake, MI
517/522-4689... 8am - 10pm |
| 3 Joe Policy, Lantana, FL
305/ 586-1111... M-F 9am-5pm
804/ 973-7416... before 10pm
804/ 973-4957... (if above # is busy) before 10pm
CompuServe - 76127,24/ The Source- STR774 | 10 J. O'Connor, Rochester, MI
313/ 853-1260
NAUG BBS - #99 |
| 4 Thomas J. Stanius, Opa Locka, FL
305/ 375-2095 ext. 8691... M-F 8am-5pm
305/ 624-6142... M-F 6pm-Midnight, S-S all day | 11 Quality Computers, Grosse Pt., MI
313/ 885-4270... 9am-5pm
313/ 885-4215... 9am-5pm |
| 5 Ronald Romanowicz, Glencoe, MD
301/ 472-4800... 8am-4pm
301/ 472-2983... 4pm-midnight | 12 Pete Ross, Wayne, MI
313/ 728-8720... 24 hr. Answ mach. leave time to return call |
| 6 Jim Anker, Hazel Park, MI
313/ 542-3910 ext 344... M-F 8-4pm
313/ 391-0033... M-F 5-10pm, S-S | 13 Richard P. Zajac, Mt. Clemens, MI
313/ 465-2615... M-F 9am-1pm |
| 7 Arthur Daniel, Warren, MI
313/ 445-7142... M-Th 7am-4pm
313/ 445-7105... M-Th 7am-4pm | 14 Peter Crosta, Nutley, NJ
201/667-6369... M-F 5pm- 9pm
201/667-2928... S-S 8am - 9pm
210/266-4335... M-F 8:45am- 3pm |
| | 15 Stuart Schneider, Teaneck, NJ
201/ 568-3336... M-F 9:30am-5:15pm
201/ 261-1983... M-F after 6pm, S-S 10am-11pm |

(Continued on page 14)

Members Helping Members Reference Chart

		Eastern Time																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Printer and interface cards																										
	Floppy disks																									
	Hard disks																									
	3.5 Inch disks																									
	Apple memory cards																									
	Checkmate Cards																									
	RamWorks Cards																									
	TransWarp Cards																									
	Other Hardware																									
	Word processing																									
	Data base																									
	Spreadsheet																									
Integration between modules																										
	Pinpoint																									
	AutoWorks																									
	GraphWorks																									
	1040Works																									
	ThinkWorks																									
	ReportWorks																									
	MacroWorks																									
	MegaWorks																									
	Point-to-Point																									
	RAMUP																									
	Sensible Speller																									
	Sensible Grammar																									
	FontWorks																									
	ProDOS																									
	Copy II+																									
	Telecommunications																									
	Educational Applications																									
		CT	FL	FL	FL	MD	MI	MI	MI	MI	MI	MI	MI	MI	NJ	NJ	NJ	NY	OH	OH	OH	OH	TN	VA	AL	IA
		M. Knight	L. T. Brooks	J. Policy	T. J. Stanius	R. Romanowicz	J. Anker	A. Daniel	J. Harris	B. Neef	J. O'Connor	Quality Computers	P. Ross	R. P. Zajac	P. Crosta	S. Schneider	S. Thomas	J. L. Nicoll	W/m Beasley	M. Elliot	R. J. Netro	P. Ritchey	Major M. Sutter	W. L. Downes	R. A. Cathey	R. Christian

Reference Chart

S. De Kirmandjian	IL	26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															</
-------------------	----	----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----

Members Helping Members...

- 16 Suzanne Thomas, Tinton Falls, NJ
201/ 842-7699... 9am-3pm, 7-9pm
CompuServe - 76012,1145
- 17 James L. Nicoll, Pittsford, NY
716/ 546-6732... M-F 7:30am-2pm
716/ 381-9480... Eve. & S-S
- 18 Wm Beasley, N. Olmsted, OH
216/ 777-7700 ext. 282... 8am-4pm
216/ 433-4408... ans. mach.
CompuServe - 71106,574
- 19 Mark Elliot, Hudson, OH
216/ 686-2280... M-F 9am-5pm
216/ 653-5006... S-S 6-11pm
GEnie - G.ELLIOT
- 20 Robert J. Netro, Canton, OH
216/477-3667... 8-11am/ 1-4pm
- 21 Patricia Ritchey, Bowling Green, OH
419/ 372-7038... M-F 8am-4pm
419/ 673-0040... Evenings & S-S
- 22 Major Michael Sutter, Clarksville, TN
502/ 798-8203 ... 6am-2pm
615/ 552-0973 ... 5-9pm
- 23 Warren L. Downes, Yorktown, VA
804/ 898-8386... M-F 12pm-4pm
804/ 898-1881... M-F after 4pm, Sat. after noon
- 24 Rebecca A. Cathey, Eutaw, AL
205/372-3581... M-F 5-9pm, S-S except Sun mom.
- 25 Roger Christian, Iowa City, IA
319/ 337-2189... M-F 9-5pm
319/ 338-7350... M-F 6-10pm
- 26 Sharon De Kirmandjian, Libertyville, IL
312/ 680-1974... after 2pm
- 27 J. T. Flynn (Terry), Lake Bluff, IL
312/ 680-0980... M-F 8am-5pm
312/ 234-2820... other
The Source- TCK890
- 28 Dennis Ricke, St. Charles, IL
312/ 377-4829... Sept-June 8am-3pm
- 29 Michael P. Warner, Glenn Ellyn, IL
312/790-0330... M-F 8am-5pm
312/ 469-2543... M-F 5-10pm, S-S all day
- 30 Victor Weisskopf, Lincolnwood, IL
312/ 674-7400... M-F 9am-5pm
- 31 Marcia Philbrick, Seneca, KS
913/336-3557... Sept-May, M-F 8am-4pm
913/ 336-3645... Eve, S-S, Summer
- 32 Fred Schwan, Leavenworth, KS
913/ 651-2878
- 33 Norman E. Hecimovich, Austin, MN
507/ 433-3425... M-F 7:30am-5pm
507/ 437-4245... 5-10pm
- 34 Tom Hexum, Maplewood, MN
612/ 487-5501... S-S 6-10pm
- 35 Bill Brescia, Union, MS
601/ 656-5251 ext. 156... M-F 8am-4:30pm
601/ 774-5609... 24 hrs. ans. mach.
- 36 Jeff Holcomb, Carrollton, TX
214/ 241-6069... M-F 9am-5:30pm
817/ 465-7978... M-F 7-10pm, S-S until 10pm
- 37 Joseph Kline, Lubbock, TX
806/ 796-0829... 8am-9pm
- 38 Bob Oberholtzer, Houston, TX
713/ 664-2011... M-F 9am-6pm
713/ 664-1795... M-F 6-8:30pm, Sat 2-7pm
713/ 664-2011... All, 24hr ans. serv
- 39 Donald C Chase, Omro, WI
414/ 685-5681... 6-9pm
- 40 Peter Lee, Milwaukee, WI
414/ 344-6807... mess. 8am-10pm
414/ 963-6180... M-F 9am-5pm
CompuServe- 73317,243/ GEnie- PETER.LEE
- 41 Mike Starck, Milwaukee, WI
414/ 545-5233... M-F 7am-5pm, also has ans. mach.
- 42 Paul Van Wyk, Appleton, WI
414/ 731-0941... 9am-4pm
414/ 739-6503... 7-10pm
- 43 Steve Feldman, Denver, CO
303/ 428-6115... All, 8am-8pm
- 44 Bob Shipek, Great Falls, MT
406/ 791-2130... 8am- 5pm
406/ 452-9104... 9pm-12am
CompuServe- 76067,3221
- 45 Bob Demmon, Coronado, CA
619/435-0554... 8am-10pm (ans. mach)
619/435-0520... (via modem) M-F 3-10pm, S-S 9am-9pm
CompuServe - 70157,3607 / NAUG BBS - #8
- 46 Terry Higgins, Hayward, CA
415/ 887-7499
- 47 Calvin M Behrens Jr., West Linn, OR
503/ 655-0058... M-F 9am-5pm
503/ 636-0762... M-F after 5pm, WE all
- 48 Jim Emig, Portland, OR
503/ 280-5666... M-F 7am-4pm
503/ 771-1916 ... S-S 7am-9pm (ans. mach)
- 49 Thomas E. Chambers, Fox Island, WA
206/549-4114... M-F 5-9pm (all day weekends)
- 50 Harve Thorn, Mexico City, Mexico
905/ 516-0720 ext 135... M-F 8am-2pm

If you've been looking for a place that knows and sells Applied Engineering hardware, call us.

APPLE

ENHANCEMENTS

RAMUP
3.0

This software/hardware combination offers instant access to over 200 Apple programs plus greatly expanded speed and storage.

ESS
PACKAGE

If you've been searching for the best way to enhance your Apple, *we've got some answers for you.* Introducing the ESS Package. *The ESS Package is special Apple enhancement hardware configured with 100% Applied Engineering components.* And with RAMUP™ ESS allows your Apple to perform in ways that you've never imagined. Our technical consultants will give you straightforward advice on which ESS Package is best for your applications needs. Or, if you haven't discovered the full potential of your Apple with ESS, we'll let you in on many of its secrets.

Even if you aren't an expert in software set-up, you'll find our walk-through installation directions and full technical support will get you up and running on RAMUP™ or ESS *in minutes.* Then, if you still aren't completely satisfied, *we'll give you your money back in the first 30 days after delivery.* We'll also guarantee our products to be defect free — *if anything goes wrong in the first five years of use, we'll send you a replacement free of charge.* Call right now, toll free 1-800-443-6697 to order your RAMUP™ program or ESS Package.

RAMUP™ 3.0 FOR RAMSPEED.

The Instantaneous RamCard Utility

Watch your boot time disappear with our improved version of this utilities breakthrough.

RAMUP™ utility software allows you to flip within 2 seconds between up to 20 Apple programs. Eliminate disk swapping through this program which doesn't require any knowledge of programming or pathnames to use!

Pull Your System Together With This Integrating Program Link

RAMUP™ is your link for immediate access between programs like AppleWorks, GraphWorks, Sensible Speller, Ascii Express, BPI, Multiscribe and most other software packages. Besides being able to flip from program to program, users can boot up other software and then immediately return back to any of the programs on their RamCard(s).

The entire program with an easy-to-understand instruction book, full guarantees and technical support is only \$39.95.

AE Applied Engineering™

Additional Products for Apple Enhancement:

PRODUCT	512K	1MEG
RAMWORKS	\$195	\$259
RAMFACTOR	\$218	\$284
ULTRA II	\$249	\$309
ULTRA III	\$294	\$364
GSRAM	\$174	\$239
GSRAM+	—	\$359

- Visa, Mastercard
- C.O.D.'s Accepted
- School & Government P.O.'s Accepted

ENTER THE ESS UNIVERSE.

Let Extended Speed and Storage Work For You

Imagine turning on your computer, entering Appleworks, loading a 50K spreadsheet, and beginning to print all in less than five seconds! Impossible? Not with the ESS Package. And that's just for starters.

The ESS Package will allow you to operate your Apple *at speeds that you never thought possible* and with *storage that will give you access to the most powerful programs* — with memory to spare. The ESS Package *also eliminates disk swapping, is easier-to-use, and greatly increases the dependability of your storage.* The complete package featuring all you'll ever need in Apple enhancements with full guarantees and technical support is available now.

ESS-Flex: An Expanded Universe For Customized Applications Needs

We have the ability to combine components to create the perfect Apple system for you. Whether you are looking to increase your flexibility or to reduce the time spent on your computer, ESS-Flex can perform for you. And it's still easy-to-use and features full guarantees and technical support starting at \$213.95.

Other Apple Enhancement Products:

PRODUCT	PRICE
TRANS WARP	\$214
RAMCHARGER	\$139
SMT no slot clock	\$54
COPY II +	\$27
SIDEWAYS	\$49
AUTOWORKS	\$29

- Free Friendly, Technical Support
(313) 885-4215
- Free newsletter with RAMUP™

Order, Toll-Free

1-800-443-6697

QUALITY COMPUTERS

1365 Berkshire • Grosse Pointe, MI 48230
(313) 885-4270 (Michigan Residents)

COMING SOON: On June 1st we will introduce the first online bulletin board, the QC BOARD, dedicated to Applied Engineering technical support and for the products listed in this advertisement. It will be loaded with answers to your applications questions and great tips on getting the most from your system. It will also feature a marketplace to buy and sell Applied Engineering hardware. The QC BOARD will be brought to you free of charge from Quality Computers as a public service to our growing customer base.

Using the Spreadsheet to Simulate Decision Support Software

by Terrel LeCesne

There is a genre of products on the market called "decision-support software". These programs help you order your priorities and step you through the process of choosing among competing alternatives. Most of these programs are designed to help businesses make complex and significant business decisions; e.g., where to locate a manufacturing facility.

Why not use the AppleWorks spreadsheet to simulate these sophisticated applications? The idea is to set up a list of factors in Column A that influence your choice between alternatives. Then give weights to each factor; these weights represent the importance of each factor to you. Finally, rate every practical alternative on each of the factors.

Sample Decision Support Spreadsheet

Figure 1 contains an example of a "Decision-Support Spreadsheet"; a spreadsheet designed to help you decide between three different cars.

In this model, I rated the importance of thirteen factors based on my own value structure. There is nothing inherently right or wrong about these ratings. Each factor, such as "Price", was assigned a rating between 1 (not important) and 5 (very important). In addition, each of the three cars was assigned a rating be-

tween 1 (not good) and 5 (very good) on each of the factors.

The columns labelled "Score" contain formulas that multiply the weight of each factor by the rating for each car. The cell at the bottom of each "Score" column calculates the sum of the scores in that column.

From the data in this model, it is apparent that I should give the most serious consideration to the Toyota Camry. Based on my value structure, it appears best suited to my needs.

Figure 1: Sample Decision-Support Spreadsheet

FACTOR	Weight	Mercury		Toyota		Toyota	
		Rating	Score	Rating	Score	Rating	Score
Price	5	4	20	2	10	1	5
Trade-in value	3	2	6	5	15	4	12
Dealer Service	5	2	10	5	25	5	25
Styling	2	3	6	3	6	4	8
Options	2	2	4	4	8	4	8
Driver comfort	4	2	8	4	16	4	16
Trunk space	3	3	9	4	12	4	12
Rear seat room	3	3	9	5	15	3	9
Reliability	5	3	15	4	20	4	20
Handling	3	2	6	4	12	4	12
Economy	2	2	4	3	6	3	6
Conveniences	2	2	4	4	8	5	10
Made in America	5	5	25	0	0	0	0
Totals			126		153		143

Weight Codes:

- 1 = Not important
- 2 = Little importance
- 3 = 'Average' importance
- 4 = Pretty important
- 5 = Very important

Ratings:

- 1 = Not good
- 5 = Very good

This is Not a Sophisticated Model

Readers versed in decision theory undoubtedly recognize the weaknesses in this decision-support model. For example, there are "disqualifying factors" not considered in the model (a Rolls Royce does well in this model because the cost of the car is only rated on a scale from 1-5 and it doesn't accommodate the significant range of costs between vehicles). In addition, the model makes too many assumptions. For example, the model assumes there is as much difference between a rating of 1 and 2 as there is between a rating of 4 and 5.

You can avoid this problem by adopting these practices:

1. Do not put impractical alternatives into the model: Don't evaluate a two bedroom house if you know you require at least three bedrooms.
2. Remember that this model is a guide; it helps you make your choice. Ultimately, you must be comfortable with your decision.

[Dr. Terrel LeCesne is an Assistant Superintendent in the Romulus (MI) Community Schools and is a former Mayor of Inkster, Michigan.]

News from Apple Computer

Apple Computer Extends AppleWorks 2.0 Upgrade Offer

Apple Computer recently extended its offer to upgrade older versions of AppleWorks to version 2.0 of the program. If you own a version prior to 2.0, you can get an upgrade by sending Apple your original AppleWorks disks, the cover of the AppleWorks Reference Manual, a form available from Apple dealers, and a check for \$50. The upgrade offer is now available through August 31, 1987

Using AppleWorks to Teach Social Studies

by Alice Jagger

Vital world statistics, manipulated with AppleWorks, can have astonishing results with social studies students in the secondary school curriculum.

Two of us at the International High School in Eugene, Oregon, developed a data base called "The Power of Nation-States" which includes data for 167 nations, with information recorded in 45 different categories such as population, ethnic groups, major trading partners, and the like.

We developed lesson plans which encourage students to use AppleWorks to examine these data, test hypotheses, and draw conclusions about (a) which nation-states possess the greatest amount of power, and (b) the factors related to the power of a nation-state.

Students learn to appreciate the conceptual challenges that occur as they use AppleWorks to create calculated categories (Apple-K), combine data from multiple categories, call up only certain attributes from the data base (using the Apple-R command), and arrange the data numerically or alphabetically.

Using these data, students participate in simulations, seminars, debates, class discussions, and other activities. Creative students often go beyond the required assignments and discover new combinations of data. Using data in this way, the teacher becomes a facilitator of learning in a classroom of the contemporary world.

For further information about the disk or teaching strategies, contact Alice Jagger at the International High School, 400 East 19th Street, Eugene, Oregon 97405 (503) 687-3115.

Correct Cables for Your Computer

Apple Computer recently sent NAUG a chart listing the cables used to connect all Apple computers and peripherals. Here is a list of all cables that work with Apple // and Apple /// series computers.

To connect an Apple //, //+, or //e using a Super Serial card:

Device	Cable number	Name of cable
Personal Modem	A2C0311 or A2C0312	Apple //e Modem—8 Cable
Modem 300	A2C0354	Modem Accessory Kit for Apple //e
ImageWriter	A2C0352	ImageWriter Accessory Kit for Apple //e
ImageWriter //	A9C0313 or A9C0314	Apple //e Printer—8 Cable
Daisy Wheel Printer	A2C0351	Daisy Wheel Accessory Kit for Apple //e
Scribe Printer	A2C0355	Scribe Accessory Kit for Apple //e

To connect an Apple //c:

Device	Cable number	Name of cable
Personal Modem	A2C4312 or A2C4313	Apple //c Peripheral—8 Cable
Modem 300	A2C4505	Modem Accessory Kit for Apple //c
ImageWriter	A3C0352	ImageWriter Accessory Kit for Apple ///
ImageWriter //	A2C4312 or A2C4313	Apple //c Peripheral—8 Cable
Daisy Wheel Printer	590-0191	Apple //c Color Plotter Cable
Scribe Printer	A2C4520	Scribe Accessory Kit for Apple //c

The cables for an Apple /// are the same as for an Apple //e with the following exception:

Device	Cable number	Name of cable
ImageWriter //	A2C0311 or A2C0312	Apple //e Modem—8 Cable

The cables for an Apple //Gs are as follows:

Device	Cable number	Name of cable
Personal Modem	MO197	Apple System/Peripheral—8 Cable
Modem 300	A2C0354 and A9M0333	Modem Accessory Kit for Apple //e Apple //Gs Peripheral Adaptor Cable
ImageWriter	A2C0352 and A9M0333	ImageWriter Accessory Kit for Apple //e Apple //Gs Peripheral Adaptor Cable
ImageWriter //	MO197	Apple System/Peripheral—8 Cable
Daisy Wheel Printer	A2C0351 and A9M0333	Daisy Wheel Accessory Kit for Apple // Apple //Gs Peripheral Adaptor Cable
Scribe Printer	A2C0355 and A9M0333	Scribe Accessory Kit for Apple //e Apple //Gs Peripheral Adaptor Cable

For a free copy of the complete chart including all Apple computers and accessories, send a self-addressed, stamped envelope to: **Apple Cable Chart; NAUG; Box 87453; Canton, MI 48187.**

Eight desktop accessories. Merge pictures into text, automatically address envelopes, log on communications window, plus five other time-saving tasks.

Pinpoint Spelling CHECKER

The only "pop up" spelling checker for AppleWorks. Checks your work - as you write - against 61,000-word main and unlimited-capacity personal dictionaries.

This macro key and scripting program speeds repetitive or complex tasks. Features "live" or menu-driven macro recording. Voted 'Most Valuable Player' on the Pinpoint team.

KeyPlayer™

Tireless mail merge and database reporting program. Direct printing, direct database manipulation, unlimited record capacity, no "print files" or file conversions. Plus exclusive "save and continue" function, calculated fields and more.

InfoMerge™

The fastest spell checker for the Apple II. This performance partner exchanges dictionaries with Spelling Checker so you can always use the best tool for the job. No wasted effort!

Document Checker™

The only communications program to fully support all Apple II GS file types. Exclusive Binary II protocol, Pinpoint Desktop Accessories' compatibility, and AppleWorks ease of use. Here's everything you need!

PointOffice™

Brilliant charting, graphic assembly and presentation graphics program. Charts AppleWorks data with ease, add Print Shop graphics (and others) at any time.

GraphicEdge™

More people use AppleWorks than all other integrated Apple II software programs combined. And for good reason.

AppleWorks™ Power Tools

Transform AppleWorks from a simply wonderful program, into an awesome integrated workspace.

Thanks to Pinpoint's open-architecture design, you can use any of our programs to boost your AppleWorks productivity. Each so well integrated, they'll become part of your AppleWorks routine in no time.

And we haven't told you about COMMAND.COM, RunRun, PROFILER 3.0, ToolKit, and the Pinpoint Starter Pak.

Over a dozen AppleWorks Power Tools in all.

But Pinpoint is more than just helpful software. We're an entire company dedicated to delivering AppleWorks solutions that save you time, effort and money.

Call or write for a **FREE** copy of our informative *Points of Interest* newsletter. And for all you current Pinpoint owners, ask about our technical support plan that includes automatic software updates.



Box 13323 Oakland, CA 94661, (415) 654-3050

How to Underline in Data Base Reports and Produce Bibliographies

by Les Blatt

AppleWorks' inability to underline in the data base module makes it difficult to prepare bibliographies and other reports that require underlining. Here's a technique that lets you use macros to underline data when you print from your data base.

My wife often finds herself compiling unalphabetized lists of books into orderly bibliographies. The AppleWorks data base is a useful tool for that function because of its ability to arrange entries in alphabetical order. You can create a master list of books and use the record selection feature of the data base to subdivide the list into smaller sub-categories. However, from a librarian's point of view, the data base has one serious drawback: It does not permit underlining. That is a problem because book titles are underlined in a bibliography.

There is a solution: Mark the entries to be underlined with a symbol, such as the plus sign (+), print the data base report to the word processor, then replace the symbols with control characters to underline each individual title. However, replacing the plus signs is not easy because AppleWorks' Replace command will not let you replace a symbol with a Control-L (Control-L is the command that begins and ends underlining in the word processor). You must find each symbol and replace it manually. That's a lot of work unless you have Key Player, Super MacroWorks, AutoWorks or some other macro program.

Working in the Data Base

If you use macros, the job is easy. Here's a step by step breakdown of how to do it using MacroWorks:

1. Create a data base using your normal category definitions.
2. Enter data into your data base file. Include all necessary punctuation marks when you make

your entries. For example, enter the author's name in the format last name, comma, first name, period. Like this:

Aardema, Verna.

3. When entering an item you want to underline, use the plus symbol (+) to surround the entry. Your record will look like this:

Record 1 of 1

```
=====
Author's name: Aardema, Verna.
Title: +Who's In Rabbit's House+.
Publisher: Dial, Year: 1977.
=====
```

4. After completing your entries, alphabetize and sort your list.
5. Create a "labels format" report and put the categories on a single line. Use the Apple-J command to left-justify each category and the Apple-D command to delete unwanted lines (which can be re-inserted in the word processor if desired). The Report Format screen will look like this:

```
Author's name <Title <Publisher <Year
----Each record will print 1 lines---
```

6. Use the Apple-O command to go to the Printer Options Menu and change the format of the report as follows:

- A. Toggle the entry PH to "NO" (to prevent "headings" from appearing in the final report).
- B. Set the Characters Per Inch (CI) to 21 and

Word Processor/ Data Base Tips...

the Platen Width (PW) to 13. In that way, the records sent to the word processor will not have RETURN's at the end of each line. You want to format in the word processor, not in the data base.

7. Print the report "To the Clipboard" for the word processor.

Working in the Word Processor

Now you will move the data into the word processor.

8. Return to the Main Menu and indicate you want to create a new document for the word processor.
9. After entering a title and any formatting instructions, use the Apple-M command to move the report From the Clipboard. That will give you a list of entries, each of which should look like this:

Aardema, Verna. +Who's In Rabbit's House+. Dial, 1977.

Next you will use the Find command (Apple-F) and do some preliminary work before replacing the "+" signs with Control-L's.

10. Invoke the Find command (Apple-F). Respond that you want to Find Text and press the RETURN key. Indicate you want to find a "+" and press RETURN.

The find function will take you to the first occurrence of "+". Respond "NO" to the question: "Find next occurrence?"

Setting Up a Macro

Now, you can set up a temporary macro to replace all the "+" signs with Control-L's.

If you have MacroWorks, the sequence is as follows:

1. Move the cursor BACK a couple of spaces, so the Find command will take you to the first "+" sign.
2. Press Apple-X to indicate you want to write a temporary macro.

3. Press the number "1", or any other number key to "name" the macro. Now, each key stroke will be recorded in the new macro.
4. Press Apple-F to invoke the Find command. Press RETURN to indicate you want to Find Text. The "+" sign will appear as the default text to find. Press RETURN to accept that entry. Then press the RETURN key to respond "NO" to the "Find next occurrence?" prompt.
5. Press the Right Arrow key to move the cursor one space to the right.
6. Press the Delete key to remove the "+" sign.
7. Press Control-L to insert the Underline Begin command.
8. Press Control-Shift-@, to indicate the end of the macro.

Now, press Solid-Apple-1 as often as necessary to replace all remaining "+" marks with a Control-L. [Ed: Some macro programs (e.g., AutoWorks and Key Player) let you write macros that repeat or call themselves. With these programs you can write a macro that repeats until all the plus signs are replaced.]

Each entry will now appear like this:

Aardema, Verna. Who's In Rabbit's House. Dial, 1977.

Your bibliography will print with all titles neatly underlined...just the way it should.

[Leslie Blatt is a writer for the ABC World News Tonight with Peter Jennings.]

Keep in Touch with AppleWorks Users

Call the **Electronic Forum**,
the Bulletin Board of the
National AppleWorks Users Group

Phone (313) 482-8090
(300 or 1200 baud)
Richard Lewandowski, Sysop

How to Print Page Numbers—Part 1

by Warren Williams

This is the first of two articles on how to print page numbers at the top or bottom of every page. This month, Dr. Williams describes how to use AppleWorks' "Header" and "Footer" commands. Next month he will describe how to use these commands to insert page numbers.

Did you know that AppleWorks lets you automatically print the correct page number at the top or bottom of any page in a word processor document? However, getting those page numbers requires you to use two often misunderstood commands: the "Footer" (or "Header") command and the "Print Page No." command.

How to Print Headers and Footers

A "Header" is a line of text that appears at the top of every printed page; a "Footer" appears at the bottom of every page. Headers and footers are useful in word processing because they let you print any single line of text at the top or bottom of every page in a document. For example, an author might want to put the title of an article at the top of every page of a manuscript or a student might want to put her name at the bottom of every page.

While you can fuss with the "New Page" command and manually insert a header or footer on any page, manually inserted headers and footers are moved if you add or delete text from your document. It's best to let AppleWorks handle that formatting problem by using the appropriate commands.

You declare a header or footer by going to the Options Menu with an Apple-O and entering an "HE" or "FO" command. Then press the ESCAPE key. Your screen will show that you called for a "Page Header" or a "Page Footer".

Now enter a line of text. The line of text AFTER the header or footer command becomes the header or footer. Figure 1 depicts a screen with a header command inserted. The words "Little Red Riding Hood" will appear underlined at the top of every page.

Placement of the Header Command

The header appears at the top of the NEXT page that prints. For example, if you want to print your header starting at the top of the second page, put the header command somewhere near the middle of the first page.

You might ask, "Why near the middle of the first page? Why not at the top of the second page?" The purpose of a header is to let you print something at the top of every page without having to change your commands if you edit your document. If you put your header command at the bottom of the first page or at the top of the second page and then add a paragraph to the first page of your document, the header command will move past the beginning of the second page. Since the word processor prints the header at the top of the NEXT page AFTER the header command, and since the header command would now appear after the beginning of the sec-

Figure 1: Sample Screen with a Header Command

```
Once upon a time, a young girl named
Little Red Riding hood was sent to
visit her sick Grandmother.
Grandmother lived deep in the forest
north of Little Red Riding Hood's
house, so the young girl started very
early in the morning.
-----Page Header
^Little Red Riding Hood^
  Little Red Riding Hood was well on
her way when she noticed something
peering at her through the trees...
```

Word Processor Tips...

ond page, your header would be printed on the third page, not the second page. So, put your header command somewhere near the middle of the page BEFORE you want the header to appear.

If you want your header to print at the top of the first page of your document, place the header command at the very beginning of your document (right after the initial formatting commands).

Placement of the Footer Command

The first footer will print at the bottom of the page on which you issue the footer command. For example, if you want the footer to appear at the bottom of the first and all following pages, put the footer command somewhere near the beginning of the first page. If you want the footer to start at the bottom of the second page, put the footer command somewhere near the middle of page two.

Cancelling Headers and Footers

There is no "cancel header" or "cancel footer" command. You turn off the header or footer by issuing a header (or footer) command, pressing the ES-

Figure 2: Example where Footer will Appear on Page 1 but not on the Following Pages.

-----Page Footer

Little Red Riding Hood

"Why are you looking at me that way?" exclaimed the child.

The wolf looked at her calmly and smiled in an assuring way, the way a dentist does when you ask if it's going to hurt.

"I wanted to see where you are going" he said quietly.

-----End of Page 1-----

"I am going to visit my Grandmother and it is getting late. So if you'll please excuse me, I'll be on my way."

-----Page Footer

"Would it be all right if I came along?" asked the wolf, still smiling as charmingly as a wolf can.

Although she did not trust him, Little Red Riding Hood hesitated to tell him no. As she stood thinking...

CAPE key to leave the Options Menu, and pressing the RETURN key to insert a blank line immediately following the Page Header (or Page Footer) command on the screen.

Figure 2 shows the commands that will print a footer at the bottom of page one but not on the following pages. In this example, the line "Little Red Riding Hood" will appear as a footer at the bottom of page one. However, the second footer command followed by a blank line cancels the command on all succeeding pages.

By using the header and footer commands, you can get text to print automatically at the top or bottom of every page. Next month I will describe how to use that power to print page numbers on every page.

Quick Tip

How to Print a Single Page

Ever try to print a single page from an AppleWorks word processor document? You put the cursor on the page you want to print, command an Apple-P and select "Print this page" from the menu. Then you know what happens. The printer starts on that page...and prints the entire document. How can you print only the single page?

The trick is to insert a Pause Each Page command (PE) available on the Options Menu (Apple-O) somewhere earlier in your document. (I insert the command at the very beginning of my file so I can find it easily when I want to delete the command.) Once the Pause Each Page command is in the document, AppleWorks will print a single page and then ask you to "Press the Space Bar to continue". Instead, press the ESCAPE key and you will return to your document without printing additional pages.

NAUG:

The National AppleWorks Users Group
Box 87453, Canton, Michigan 48187 U.S.A.
(313) 397-1594

TIME VALUE MATERIAL

NAUG Membership

Name: _____
Member N^o (if renewing): _____
Address: _____

City: _____ State: _____
Zip or mail code: _____ Country: _____
Home Phone: _____
Work Phone: _____
Computer type: _____
Modem type: _____
Printer type: _____
Peripherals: _____
Expanded memory card: _____

NAUG shares members' addresses with other users groups & selected vendors. If you do NOT want to receive mail from these agencies, please check here: ☐

Check all which apply:

- ☐ Membership: \$24 for 12 months of the **AppleWorks Forum***
- ☐ 1st Class Mail (to US, Canada, & Mexico): \$10**
- ☐ Surface Mail (outside US, Canada, & Mexico): \$10**
- ☐ Air Mail (outside US, Canada, & Mexico): \$25**

*Membership in NAUG is free. Your \$24 is for a one-year subscription to the **AppleWorks Forum**.
** In addition to NAUG membership.

Send this completed application and your payment. Total Enclosed: \$ _____

AppleWorks is a trademark of Apple Computer, Inc.

Guidelines for Contributors

The **AppleWorks Forum** consists entirely of materials contributed by NAUG members. The **AppleWorks Forum** publishes three types of member contributions:

1. Letters: A letter written to the Editor that asks or answers a question, shares an idea or makes a statement.
2. Notes: A note is a brief article about a single theme.
3. Articles: Articles are generally from two to five double-spaced pages long.

How to Submit to the AppleWorks Forum

1. Send paper copies of letters.
2. If possible, send both paper and disk copies of notes and articles. All disk copies should be AppleWorks files on 5-1/4 inch disks. If you don't submit a printed copy, please include a note describing what is on the disk.
3. All submissions to the **AppleWorks Forum** should include your name, address and telephone number. We will cite you as the author of the letter, note or article but will not include your address or telephone number unless you specifically request that those be published. The Editor will make any necessary editorial changes to your submission. Mail your submission to:

Cathleen Merritt, Editor, **AppleWorks Forum**
Box 87453, Canton, MI 48187

If you are a NAUG member and your article is published in the **AppleWorks Forum**, you will receive a **one year extension** to your membership. (This offer is not valid for letters to the editor or for short notes.)

Seminar Schedule

NAUG sponsors half-day AppleWorks seminars in various locations throughout the country. These seminars, entitled "AppleWorks: Beyond the Basics", are intended for AppleWorks users who want to solve AppleWorks problems and learn new techniques to help them use the flexibility inherent in the program.

The presenter, Dr. Warren Williams, is a technical advisor to NAUG and a frequent contributor to the **AppleWorks Forum**. He has written more than thirty articles about AppleWorks and has conducted AppleWorks seminars throughout the country.

Future seminars:

- July 11 — Batavia, NY (Buffalo/ Rochester)
- July 25 — Cleveland, OH (Akron/ Canton)
- August 1 — Boston, MA
- August 8 — New Rochelle, NY
- August 15 — Plainview, Long Island, NY
- August 22 — Clark, NJ (Newark/ Elizabeth)
- August 29 — Tysons Corner, VA (Washington, DC)

Write or call NAUG for more information (313) 397-1594